OBSERVATIONS

ON

UTERINE TUMOURS.

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Taken singly, the following cases do not perhaps present such features of interest as would warrant their being put on record. But, placed as they were in the Infirmary in one ward, and at the same time, I found them so well adapted for the purposes of clinical teaching, that, when taken collectively as a group, they became invested with a greater interest than before. As a means of mastering the difficulties of diagnosis, this grouping of cases, which the ample opportunities of a large general hospital frequently admit of, has an importance which can scarcely be over-estimated. Symptoms which are present in one case and absent in another, are certainly more thoroughly appreciated when the cases are in juxtaposition, than when either is studied alone. By carefully marking the points of resemblance and dissimilarity, the observer certainly adds something to his store of knowledge, and, not unfrequently, facts come under his observation which, if put on record, may aid others having the same difficulties to encounter. On these grounds, then, are the following cases recorded. The details are in great part taken from reports in the ward journal by my assistant Dr. Wood Smith.

Case I. — *Group of Fibroid Tumours connected with the Uterus—Displacement of the Os—Diagnosis—Action of the Ergot of Rye.*

Isabella B., aged 48, a domestic servant and single, was admitted on the 20th of May, 1864. The following report of her case was then entered in the journal :—

"It is now fully more than six years ago that, by having pain and difficulty in micturition, and an aggravation of a dragging sensation about the loins, which had existed for many years, her attention was drawn to a small hard swelling about the size of an orange, situated a little to the right of the hypogastric region. The tumour is slightly sensitive to pressure, and has gradually increased to its present dimensions, causing micturition to be impracticable in an upright position from the large mass pressing downwards on the urethra and neck of the bladder, frequent calls to empty the bladder, and pain

during defecation if the bowels are constipated. She has derived much comfort and support from wearing an abdominal bandage. She has never been pregnant, and has menstruated regularly since the age of puberty. The discharge, she states, is now much more profuse than formerly, and during these periods, although her appetite at other times is good, she has a loathing for her ordinary food, and a craving for unusual articles of diet. Dyspeptic symptoms are sometimes present, accompanied with palpitation.

"On admission, patient is observed to be of a nervous temperament, and very easily excited. She lies most comfortably when reclining on her back, turning herself at the same time somewhat towards the left. Her tongue is natural in appearance, but she generally complains of thirst. Respiration is well performed. There is no enlargement of the heart, but over the apex of this organ a bellows murmur, following the first sound, is audible. The pulse is 62.

"The abdomen contains a large firm tumour, very irregular in its outline, and extending above the umbilicus. It is movable in all directions superiorly, and evidently has risen from the pelvis. To the right side it is large and globular, but on the left it feels as if it were made up of several small tumours massed into one, some of which can be moved to a slight extent on the surface of the general mass. No fluctuation can be detected at any point. A *bruit de soufflet* can be heard over the lower part of the tumour, being especially loud and distinct in the left iliac region. This bruit is intensified by the pressure of the stethoscope, and can be heard, although more faintly, in the lumbar region posteriorly. On causing the woman to assume the erect posture, the tumour falls forward, and the bruit is lost. On introducing the finger into the vagina, a great part of the pelvic cavity is found to be occupied by a firm tumour, which extends downwards as far as the third division of the sacrum, and so far forwards as with difficulty to admit of the passage of the finger behind the symphysis pubis. The axis of the vaginal canal lies in this latter direction; but although the finger can be passed as far as the upper part of the symphysis, the os uteri cannot be reached. This vaginal tumour alters its position to a certain, although limited, extent when the abdominal tumour is moved, as can easily be done, from side to side. When the patient is in the erect posture, the tumour gravitates forwards and prevents micturition. An elastic male catheter was passed upwards for about two and a half or three inches beyond the symphysis, when it met with an impediment to its further progress. A sound when introduced into the bladder was found to pass upwards immediately behind the pubic symphysis, and then to the right side, where its extremity was felt by the finger in the right groin. The finger in the rectum was passed upwards behind the tumour for a certain distance, and in this situation the gut was found to be flattened out by the pressure, the very obvious cause of the difficulty in defecation alluded to above.

"*June* 14*th*.—Profuse menorrhagia has been going on for the last few days. This is checked in the erect posture, but is encouraged when she lies upon her back.

"To have a cold astringent injection every two hours.

"18*th*.—The hæmorrhage still continues, although somewhat abated. The injection to be continued of increased strength.

"22*nd*.—The hæmorrhage is to-day as excessive as ever, coming occasionally in slight gushes. She is much paler than she was before:—

℞. Pulv. Ergotæ. recent. gr. xxx.

"To be infused in a tea-cupful of water, and taken as soon as possible.

"23*rd*.—Shortly after taking the dose of ergot, patient experienced a sensation of pretty acute pain in the abdomen, which she referred to the anterior surface of the tumour. This pain continued for some time, and was attended with a marked diminution of the hæmorrhage; which, however, has again somewhat increased this morning."

From this time no detailed reports of the case were made. I would only add, in continuation of the above, that at the next menstrual period the ergot was employed with like success in the treatment of the excessive hæmorrhage.

The facts actually observed, and recorded in the preceding report, leave indeed little room for doubt in the minds of those who have paid any attention to the pathology and diagnosis of uterine tumours. There are, however, several points in regard to the diagnosis, and one in reference to treatment, which may be noted. Among the more important of the facts upon which the diagnosis was founded, may be mentioned the hardness of the tumour from the first, its nodulated and irregular outline, its slow growth, the hæmorrhage with which it is accompanied, and the existence of the bruit. It is attended, however, by certain symptoms of minor importance, which would seem, were they taken alone, to indicate an ovarian origin. I allude more especially to the occurrence of œdema, which is stated by some authors to be very rare as a concomitant of uterine tumour, and also to the growth from the right side. Another feature of interest, and constituting some little difficulty in this case, was the peculiar anatomical relations of the tumour, as observed from the vagina. In one of the best and most recent of modern treatises on the diseases of women, Dr. Graily Hewitt classifies tumours in the vagina according to the relation which they bear to the os uteri, founding his classification here, as indeed throughout his work, on diagnosis. Now, in the case in point, the os not being within reach, such a means of diagnosis was of course inapplicable, and it was only indeed by a careful observation and weighing of all the facts of the case, that I felt myself justified in coming to a positive conclusion.

But to me the most interesting point in connection with this case was, the effect of ergot of rye in arresting hæmorrhage, and causing contraction of the uterine fibres. In the last number of the *Glasgow Medical Journal*, my friend and colleague, Professor Gairdner, published a report of an interesting case of uterine tumour, which was temporarily under my care during his absence in the beginning of the present year. The hæmorrhage in this case being excessive, and having had occasion to observe about that time, in more than one case, the great efficacy of ergot in menorrhagia, I prescribed this remedy, not however, I confess, very hopefully. The result has already been detailed by Dr. Gairdner, and was very fully confirmed by his subsequent observations. In his case the contraction which took place was permanent, not of course from the sustained action of the ergot, but perhaps from the first contraction having brought the inner surface of the uterus in contact with some solid portion of the

tumour, which henceforth caused permanent contraction by the establishment of a reflex act. But in the case I have now detailed no decided contraction could be observed by the hand, the tumour being originally so much more dense than in the former case, that no increase of hardness could be expected; and it was only from the pain and arrestment of the hæmorrhage being so evidently connected with the physiological action of the ergot, that we were able to assume that uterine contraction had actually taken place.

From the facts observed in the two cases, we may assert that the ergot of rye tends to arrest the hæmorrhage in cases of uterine tumour, and that it so acts by contracting the muscular fibres of the uterus, the manner indeed in which, in all probability, it acts in all those cases of menorrhagia in which it is successfully administered. And further we may infer, that this action of the ergot of rye, when taken along with other symptoms, may be of some use as an aid to diagnosis.

The only other feature of interest in reference to this case, and one which was carefully and repeatedly observed and studied, was the souffle which is alluded to in the report. The precise diagnostic value of a souffle as indicating the presence of a uterine as distinguished from an ovarian tumour, is a question which is as yet far from being satisfactorily settled; although it seems to be the opinion of many of those who have studied the subject with the greatest care, that this symptom should have great weight as evidence of a tumour being uterine. That it is absolutely pathognomonic, probably no one will venture to assert. It therefore becomes a matter of much interest to determine under what circumstances we are warranted in relying upon this sign. Dr. M'Clintock in his admirable work on the "Diseases of Women," (p. 131), describes a murmur synchronous with the pulse, at times "a mere whiff," and at other times "prolonged and musical," and having the ordinary characteristics of the so-called *bruit placentaire*. In alluding to this souffle, he says, that "although a very interesting phenomenon, it is not one of any special diagnostic value, being common to pregnancy and ovarian disease, which are the two conditions most likely to be taken for fibrous tumour of the uterus." Dr. Savage, one of the latest writers on the subject, maintains that the souffle of a uterine fibroid is invariably intra-uterine, or in other words, is due to the same cause as is now believed to produce the souffle of pregnancy. This, at least, I take to be his meaning. In our case, however, it will be observed that most of the characteristics of the true uterine souffle were absent. The sound was loud, musical, and as it were tubular, was increased by the pressure of the stethoscope, and ceased in the erect posture—a state of matters which seemed

to me to indicate that the souffle was caused by the pressure of the tumour on the aorta or iliac arteries; for that the tumour did fall forward when the patient stood up, was otherwise proved by the impossibility of micturition in this posture.

Since the patient was dismissed, I have found in a report of Dr. Routh's Lettsomian lectures * a theory which seems to me not only to be plausible in itself, but also to account satisfactorily for what was observed in this case. Dr. Routh says that two murmurs arising from different causes may be observed in cases of fibrous tumour; that of these, one, the true *bruit placentaire*, is *vesicular*, and may occur not only in pregnancy, but in ovarian disease; but that the other, which is *tubular*, and due to pressure on the aorta, "is rarely, if ever, heard in pregnancy and ovarian disease." Until I had read Dr. Routh's admirable lectures, I inclined to the opinion that this as a diagnostic sign was of much less importance than some would have us believe, but I confess that the original view which Dr. Routh has taken of the matter has considerably modified my opinion. Should the observations of others confirm those of Dr. Routh, we will probably find in his theory the solution of the problem. Certainly, in the case in point, its application is obvious. If, as Dr. Savage says, the souffle in uterine fibroids were indeed caused by the passage of blood through the vessels of the organ itself, and by this alone, a change of posture would have no effect upon it; whereas if, as Dr. Routh maintains, it be due to pressure on the aorta, the facts as observed are exactly those which in theory we would expect.

Case II.—*Fibrous Polypus connected with the posterior Peritoneal Surface of the Uterus—Erosion of the Os.*

The patient in this case, L. D., was admitted on the 23rd of May. The report founded on her statement is as follows:—

"Since her marriage ten years ago, patient has never enjoyed good health. During her first pregnancy she appears to have suffered from some irritation of the urinary passage, as she had frequent micturition with scalding urine; but this passed off, and her labour, though smart, was not unusually prolonged or severe. On rising on the ninth day after her confinement, she experienced a dragging gnawing pain in her back over the lumbar region, and this extended down the inner sides of both thighs. Two years after this she bore another child, and this time her labour was very severe. Since this event seven years have now elapsed, and during this period the menstrual function has been quite regular, but she always has a leucorrhœal discharge during the intervals. She was under treatment for some time at one of the English provincial hospitals, for ulceration or erosion of the os uteri, for which caustics were liberally and frequently applied. Menstruation, which always continues for several days, is

* See British Medical Journal, for May 28, 1864.

accompanied with pain in both mammæ, with an aggravation of the dragging sensation in the loins, which has been already referred to. Her appetite for food is pretty good, and she does not suffer from nausea. The bowels are habitually costive, and she states, in describing the act of defecation, that she feels as if there was some obstruction within the gut, a sensation which she refers to a point near the promontory of the sacrum. She has very frequent desire for micturition, but the urine has always been clear.

"On admission, patient, though delicate-looking, has no waxy pallor. Her tongue is moist and clean. Pulse 64, and rather feeble. The respiratory sounds, as observed over the whole chest, are healthy; but in the cardiac region, over the aortic valves, the second sound is heard to be prolonged into a soft murmur, which can also be traced for some distance along the course of the great vessels. On introducing the speculum, the anterior lip of the os uteri is seen to be considerably enlarged, congested, and eroded with traces of extensive cauterization. On examination by the finger, the same part is felt to be enlarged and indurated. Immediately behind the os a firm movable tumour can be felt through the vaginal wall, resembling in shape a pear slightly flattened with the large end downwards, a fact which is much more accurately observed on examination by the rectum, when the movable nature of the tumour is also more exactly ascertained. The uterine sound, when introduced into the os, passes upwards and forwards in the normal axis of the organ for $2\frac{3}{4}$ inches, and any movement communicated to it by the sound may be observed in the tumour by the finger in the rectum. There is slight tenderness on pressure behind the symphysis pubis, but no tumour can be felt in the situation. The urine is pale and slightly acid, with a mucous deposit; sp. gr. 1012."

The leading features of this case indicate, I think, with tolerable certainty, that this is an instance of the somewhat rare variety of uterine fibroid, where the tumour on the peritoneal surface of the organ assumes the polypoid form. The seat of its attachment is on the posterior surface, probably near the fundus, and the case is one in which, though not absolutely beyond the reach of operative interference, we should never be justified in interfering under the circumstances. It is more than probable that the altered condition of the os is connected in some way or other with this tumour, or with a general congestive or other morbid condition of the organ. Indeed it affords, I am inclined to think, a striking instance of the indiscriminate manner in which caustics are often employed in uterine disease. When the disease is localized, or even when there is truly an ulceration of the os, no one will deny that caustics may be applied with more than a fair prospect of success; but when the so-called ulceration is nothing more than an epithelial abrasion, and is, as is probably the case in the majority of instances, merely symptomatic of a general congestive state of the organ, or of changes which are the result of congestive or inflammatory action, the action of caustics is always doubtful, and often undoubtedly hurtful. In this case caustics had been applied once or twice a week for many months, without in the slightest degree benefiting the patient. On the contrary, the result would tend to show that the treatment was not applicable to a case such as this. During the

whole time that the patient was in the Infirmary, no caustic application was employed; on the contrary, the only means employed were injections of tepid water, mild counter-irritation over the sacrum, and the following prescription, closely resembling one strongly recommended by Dr. West, and to the efficacy of which in cases of uterine leucorrhœa, with a sluggish action of the bowels, I can bear the strongest testimony:—

℞. Sulph. magnesiæ ℥i.
Sulph. ferri gr. xx.
Acid. sulph. dil. ♏i.
Aquæ ad ℥viii.
Sig.—A table-spoonful in water three times a day.

Cases such as this constitute perhaps the most striking of the many illustrations of the abuse of caustics, a subject which was recently brought under the notice of the readers of this journal in an able paper by Dr. James Morton. The patient left the Infirmary about the middle of July, her general health having considerably improved, and the leucorrhœal discharge having greatly abated. In other respects the symptoms were unchanged.

CASE III.—*Retroflexion of the Uterus—Reposition by the Sound—Use of Simpson's Pessary—Unsuccessful Result.*

J. M., aged 25, widow, a washerwoman, was admitted on the 24th of June. The following notes taken from her own statements, and founded on the observations made in reference to her case, afford a succinct and tolerably complete history:—

"Patient has never been thoroughly well since her last confinement, which occurred two and a half years ago. She has since then always felt the lower part of her back weak, and painful on any slight exertion. She nursed her last child, which was the fourth, for fifteen months, and continued comparatively well till a year ago, when suddenly one day, while standing at work ironing some linen, a pain shot into her back in the lumbar region, and she was also pained over the chest and abdomen. She does not admit having had any sensation which gave her the idea of anything giving way about the pelvis. This pain has continued and is increasing, becoming much aggravated during the menstrual periods, which are quite regular in their recurrence; but both before and after their appearance, she is so unwell as to be incapacitated for work, for besides the lumbar pain she has severe headache, and the mammæ sympathize with the uterus by becoming very painful. Her appetite for food is much impaired, and she is troubled with dyspepsia, which is relieved occasionally by the vomiting of very bitter matter. She always has uneasiness over the hepatic region. Her bowels are habitually costive. She says she cannot account in any way for her illness. After her confinements she never rose before the eighth day.

"On admission, she appears to be in a poor state of health, and is continually harassed with the lumbar pain already referred to, which is always stationary and never shoots down her thighs. Tongue slightly foul; pulse 60. The cardiac and pulmonary sounds are natural. The abdomen is tympanitic on

percussion, and slight pressure by the hand in the epigastric region causes pain. In like manner pressure on the region of the liver causes marked uneasiness, although not absolute pain, and the left lobe of this organ is evidently somewhat enlarged. The dulness on percussion does not, however, extend upwards. The urine is of a greenish-yellow colour, and acid. Its specific gravity is 1012, and it contains no albumen.

"On introducing the finger into the vagina, the os uteri was felt to be properly situated, both as to its height in the pelvis and its direction, and more than usually patent. Immediately behind the os a firm rounded tumour was felt, occupying the recto-vaginal pouch. On firm pressure by the finger, this tumour was found to be movable, but the fact was more satisfactorily ascertained by passing the finger into the rectum, by which means the tumour could be pushed upwards to a considerable extent. In shape and size it closely resembles the fundus of the uterus. On the uterine sound being introduced into the *os externum*, its point passed upwards and forwards in the usual direction for about three-quarters of an inch, but was here arrested by an obstacle which no exertion short of actual violence could succeed in overcoming. The rectum not being empty, a dose of laxative medicine was ordered.

"*July* 1*st*.—The bowels having acted very freely, and the gut being now empty, an attempt was again made to pass the sound. The point of the instrument was, on this occasion, turned, not in the direction of the axis of the pelvic brim, but backwards towards the tumour above described. The attempt was, however, quite unsuccessful, until the finger was passed high into the rectum, and the tumour pushed upwards in the direction of the right sacro-iliac synchondrosis. When this had been done to some extent, the sound passed at once and without difficulty into the tumour, through the walls of which it could be felt from the rectum. By the combined action of the sound and the finger in the rectum, the fundus uteri was cautiously raised by the right side of the promontory of the sacrum into its proper position, while at the same time the flattened handle of the sound was observed to make a complete half turn. The operation was attended with instantaneous relief of the pain from which she had so long suffered. She was ordered to lie on her face, and an opium suppository was prescribed.

"2*nd*.—The uterus was retained in its normal position for some time, but on examination this morning it was found to have resumed its former faulty position. It was again replaced with the same precaution, and the same directions were given as before."

As it is unnecessary to enter at any great length into the further details of the case, it may be stated shortly that it was soon found, as was indeed feared from the first, that the uterus could not be maintained in its proper position for more than a few hours at a time, and that only by perfect rest in the prone position. Indeed it was soon manifest, that the manipulation necessary for the repeated restitution of the organ had the effect of relaxing the parts to such an extent, that it was both replaced and fell into its old position much more easily than at first. In these circumstances it was obvious, that unless some mechanical expedient were resorted to, we could neither hope for a cure, nor for any permanent alleviation of the harassing symptoms from which the patient suffered; and I therefore resolved, though with many misgivings, to attempt a permanent cure by means of Dr. Simpson's stem pessary.

It is, indeed, unnecessary to give any description of an instrument so well known as this; but it must be evident to all that its mode of action renders it peculiarly well fitted—theoretically at least—for the successful treatment of retroversion and retroflexion of the womb, and especially of the latter. In a case of retroflexion, when the stem of the pessary has been introduced into the uterine cavity, and the organ restored to its normal position, two indications have already been fulfilled. In the first place, the uterine axis, from being strongly curved, has been rendered perfectly straight; and secondly, this axis has been restored to its proper anatomical relations, the first indication being thus a mere straightening of the uterus, and the second a reposition of the entire organ. It is quite manifest from the whole history of this subject of displacement of the unimpregnated uterus, from the days of Ætius downwards, that all the mechanical methods which have been devised for the cure of this affection, whether acting from the rectum, the vagina, or the bladder, are as incomplete in theory as they have been proved to be inefficient in practice, save this one mechanical expedient which has been brought more prominently under the notice of the profession by Dr. Simpson.

To return to our case, however, the simple stem pessary, without any additional or auxiliary apparatus, was introduced after a good deal of difficulty, the reason of which was not apparent, on the 8th of July. The immediate result was the complete removal of the lumbar pains, as before. The lips of the os rested on the bulb of the instrument, and it remained in its place without any difficulty. On the following morning matters were unchanged, with this exception, that although there was no tendency on the part of the stem to escape from the cavity of the uterus, the bulb, and with it, of course, the os uteri, had a decided tendency to slip somewhat forwards. By means of a plug of cotton wool, along with perfect rest, this was prevented to some extent at least, although imperfectly. The stem remained completely in the cavity until the 20th, when some symptoms of uterine irritation having become apparent, it was removed without difficulty. In a very short time, however, the fundus fell backward into its former situation. Among the symptoms which appeared at this time were some which led us for some weeks to dread the occurrence of pelvic cellulitis, while a severe attack of jaundice, with congestion of the liver, resulted in a protracted and severe illness, from which the patient is only now recovering slowly. Under the circumstances, the idea of any further treatment of the retroflexion was of course abandoned.

The only other point of interest which I would note before leaving the narrative of the case, is the position of parts at present. On examination a few days ago, I found that the fundus

uteri could still be felt quite distinctly in the posterior part of the upper vaginal wall. The os, however, no longer occupies the position as described at the time of patient's admission to the Infirmary, but is tilted forwards, and lies behind and a little below the lower part of the symphysis pubis. Or, otherwise to describe the altered anatomical relations of the parts, it may be said that the result of the mechanical treatment in this case has been to convert a case of retroflexion into one of retroversion. It should be added, moreover, that the woman's sufferings due to this cause have been of late much relieved, but this, it must be admitted, is more probably due to the effect of prolonged rest on the organ itself, than to the alteration in position which has just been noted.

I have already said that the use of the intra-uterine pessary was determined upon with many misgivings, and, indeed, was only used as the sole means which seemed to me to offer the slightest chance of a favourable result. That this chance was purchased at some risk is probably a fact which few will doubt, nor can it be denied that the instrument is one which should never be employed if it can possibly be avoided. But in fairness I must add, that up to the time that the pessary was removed, I was astonished that not only was its use not attended with any very marked irritation, but was accompanied, for the time at least, by marked beneficial results. It must not, however, be forgotten that the French Academy, after inquiring minutely into the details of seven fatal cases, almost unanimously condemned the use of intra-uterine pessaries, while most of the eminent British accoucheurs are even more vehement in their opposition.

The great difficulty in cases where the use of this instrument has been decided upon—speaking just now, of course, of retroflexion and retroversion only—is to keep the os backwards in the hollow of the sacrum, and to keep the instrument *in situ* in regard to the uterine cavity. This difficulty has been overcome by Dr. Simpson by means of various mechanical devices, applied either externally or within the vagina, a description of which will be found in his work. Quite recently a double-jointed uterine pessary has been figured and described by Dr. Wilkie, physician to the Melbourne Hospital, but the idea seems to be essentially that involved in the third form of pessary for the purpose described by Dr. Simpson. Dr. Wilkie, however, claims for it certain advantages over that of the Edinburgh professor.*

The case which I have just detailed, and which is the last of the group, has a greater interest—in a diagnostic point of view

* Paper read before the Medical Society of Victoria, July, 1863.

at least—when taken in connection with that which immediately precedes it. In both the os was normally situated, and in both the recto-vaginal pouch was occupied by a hard movable tumour. In the history of the two cases will be found the method of distinguishing between them, and the precision which is now given to the diagnosis of such cases by the use of the uterine sound. The fact of the two cases being together in the ward gave me an excellent opportunity of imparting practical information to my clinical class; but I trust that the exceptional use of the intra-uterine pessary in the latter case will not encourage them rashly to adopt a similar mode of treatment without carefully weighing all the circumstances of the case.

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